

19 MAR 2005

Internatic application No  
PCT/GB 03/03967

10/527347

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 G01N27/411 G01N27/407

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 882 032 A (TIWARI BASANT L) 21 November 1989 (1989-11-21) column 1, line 55 -column 3, line 45	1, 11-13, 21
Y		2, 3, 18
A		8
Y	US 5 445 725 A (KOIDE KUNIHIRO ET AL) 29 August 1995 (1995-08-29) column 6, line 12-20 column 7, line 63 -column 8, line 11	2, 3
A		13
	---	
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

7 January 2004

Date of mailing of the international search report

15/01/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Brison, O

## INTERNATIONAL SEARCH REPORT

Internat. Application No

PCT/GB 03/03967

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 664 757 A (ZUPANCIC JOSEPH J ET AL) 12 May 1987 (1987-05-12) abstract column 2, line 60 -column 3, line 10 column 10, line 55 -column 11, line 24 column 11, line 45-55; figure 4	1,17,21, 22
A	----	4
X	EP 0 330 249 A (ENIRICERCH SPA) 30 August 1989 (1989-08-30) abstract column 1, line 16 -column 3, line 8 column 3, line 40-51	21,23
Y		18
A		1,4
A	GB 1 234 922 A (UNITED NUCLEAR CORP.) 9 June 1971 (1971-06-09) page 3, line 67-72	1,4,5
A	KATAHIRA K ET AL: "A solid electrolyte hydrogen sensor with an electrochemically-supplied hydrogen standard" SENSORS AND ACTUATORS B, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. 73, no. 2-3, 10 March 2001 (2001-03-10), pages 130-134, XP004317268 ISSN: 0925-4005 page 130	22
A	YAJIMA T ET AL: "CAZRO3-TYPE HYDROGEN AND STEAM SENSORS: TRIAL FABRICATION AND THEIR CHARACTERISTICS" SENSORS AND ACTUATORS B, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. B05, no. 1 / 4, 1 August 1991 (1991-08-01), pages 145-147, XP000265949 ISSN: 0925-4005 cited in the application page 145	1

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/GB 03/03967

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 24-26  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
Claims shall not rely on references to the description or drawings, Art. 6, Rule 6.2 (a) PCT
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB 03/03967

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4882032	A	21-11-1989	NONE
US 5445725	A	29-08-1995	JP 2057936 C 10-06-1996
		JP 6273374 A 30-09-1994	
		JP 7092449 B 09-10-1995	
		JP 2578542 B2 05-02-1997	
		JP 7225209 A 22-08-1995	
		JP 7049330 A 21-02-1995	
		JP 7119728 B 20-12-1995	
		JP 2578543 B2 05-02-1997	
		JP 7225210 A 22-08-1995	
		JP 2530076 B2 04-09-1996	
		JP 7225211 A 22-08-1995	
		JP 2578544 B2 05-02-1997	
		JP 7225212 A 22-08-1995	
		JP 7049331 A 21-02-1995	
		JP 7119729 B 20-12-1995	
		JP 7020082 A 24-01-1995	
		JP 7119730 B 20-12-1995	
		JP 7020083 A 24-01-1995	
		JP 7119731 B 20-12-1995	
		JP 7020084 A 24-01-1995	
		JP 7119732 B 20-12-1995	
		AT 166973 T 15-06-1998	
		AU 654219 B2 27-10-1994	
		AU 2855792 A 08-07-1993	
		CA 2083909 A1 27-05-1993	
		DE 69225778 D1 09-07-1998	
		DE 69225778 T2 19-11-1998	
		EP 0544281 A1 02-06-1993	
		KR 9703280 B1 17-03-1997	
		US 5439579 A 08-08-1995	
US 4664757	A	12-05-1987	NONE
EP 0330249	A	30-08-1989	IT 1215930 B 22-02-1990
		AT 114045 T 15-11-1994	
		DE 68919243 D1 15-12-1994	
		DE 68919243 T2 20-04-1995	
		EP 0330249 A2 30-08-1989	
		ES 2063112 T3 01-01-1995	
		US 5453172 A 26-09-1995	
GB 1234922	A	09-06-1971	NONE